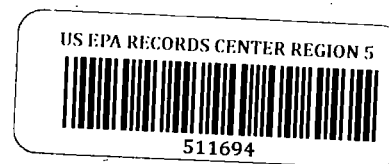


11/12/03

**ATTACHMENT A
STATEMENT OF WORK**

November 12, 2003



Prime Contractor	:	Tetra Tech EM Inc.
Technical Contact	:	Bill Kosco or Steve Wolfe (440) 234-0886
Client	:	U.S. Environmental Protection Agency Region 5
Contract No.	:	68-W-00-129
Project No.	:	G9009-E-0309-007
Project Title	:	Trenching and Test Pit Excavation
Site Name	:	Stetzer Road Landfill (SRL)
Subcontract RFP No.	:	000XXXX
Subcontract Term	:	December 8 through 12, 2003

A. INTRODUCTION

Tetra Tech EM Inc. (Tetra Tech) received Technical Directive Document (TDD) No. S05-0309-007 from the U.S. Environmental Protection Agency (EPA) Superfund Technical Assistance and Response Team (START) Contract No. 68-W-00-129. The EPA requested Tetra Tech to conduct an investigation to further evaluate the SRL site by excavating a representative number of drums to be sampled from four suspect areas that were identified during a surface geophysical study conducted within the boundaries of the site on October 7, 2003.

In support of this effort, a subcontractor is required to provide all labor and equipment necessary to excavate approximately eight test pits to an unknown depth; however, the excavation may reach to about 15 feet below ground surface (bgs). The subcontractor will also provide all labor and equipment necessary to remove and overpack a representative number of drums (estimated at 5 drums total) from the test pits as determined by Tetra Tech and the U.S. EPA. Tetra Tech will be responsible for sampling the excavated drums. The work is expected to last two days but may continue into a third day depending on site progress.

The subcontractor shall manage the project to ensure that the activities defined in this Statement of Work (SOW) are accomplished in an effective and timely manner. The Tetra Tech project manager will be Bill Kosco and the proposed field team coordinator will be Steve Wolfe. The subcontractor shall

communicate with Tetra Tech on a regular basis to discuss technical, scheduling, and administrative issues that may affect the project completion date.

B. BACKGROUND

The SRL site is at 4676 Stetzer Road, Liberty Township northeast of Bucyrus, Ohio. The SRL site operated from about 1966 through 1971. During this period, it is alleged that Swan Rubber Company of Bucyrus disposed an estimated 720 drums of waste per year. According to recently obtained information and historic health department records, the drums contained an oil water mixture with possible solvents. No analytical data is available to verify the composition of the drummed waste (Ohio EPA 2003).

The SRL site is currently owned by the Thomas Betts Company who purchased the property from Amerace in the mid-1990s. Anchor Swan Rubber was a subsidiary of Amerace. The landfill is on a floodplain and seasonal flood water of the Sandusky River comes in contact with exposed wastes. The SRL site is unsecure and there is evidence that local residents use the fill area for recreational 4-wheeling (Ohio EPA 2003).

C. TASKS

The following tasks will be completed:

Task 1 - Mobilization and Demobilization

The subcontractor shall transport all necessary resources to perform the work at the site and remove the same at the completion of the work. The resources include, but are not limited to, personnel, equipment, supplies, and materials. All equipment shall be clean and in working order, and personnel shall be competent at operating the equipment and performing the outlined work tasks. All work to be performed is expected to be in Level C personal protective equipment (PPE); however, the subcontractor should be prepared to upgrade to Level B should air monitoring results warrant an upgrade in personal protection.

The subcontractor is responsible for having a utility location performed for site clearance before excavation begins to confirm that no underground utilities (sewer, telephone, fuel, electric water, etc.) are present within the site boundaries. Tetra Tech and U.S. EPA will be responsible for deciding on and marking the test pit locations prior to excavation.

Task 2 – Test Pit Activities

The subcontractor will provide equipment capable of completing up to eight test pit excavations to a depth of 15 feet below ground surface in areas designated by Tetra Tech and U.S. EPA. The purpose of each test pit excavation is to expose and remove drums of unknown contents and sample the contents for waste characterization. Each test pit excavation will consist of (1) the removal of surface and subsurface soil to the extent of drum identification, (2) the staging of excavated materials on 10 mil leak-proof plastic sheeting bermed to prevent run-off of potential contaminants, (3) the removal and staging of excavated drums into overpacks provided by the subcontractor, (4) the collection of a representative drum sample by Tetra Tech, (5) backfilling of original excavated material to the original surficial grade, and (6) possible equipment decontamination. The excavations will be kept as small as feasible while meeting the project objectives.

Since the purpose of the excavation is to remove drums of unknown waste material, care must be taken during excavation and removal activities to maintain the integrity of the buried drums. The subcontractor must exercise extreme caution during excavation and drum removal activities. The subcontractor should also have equipment such as a brass or “non-sparking” spike to remotely puncture the top of the drum to allow easy assess for Tetra Tech to sample the contents using a drum thief. During excavation procedures, Tetra Tech personnel will be monitoring the air and soils.

D. DECONTAMINATION

Excavation equipment must be steam-cleaned before work begins. If the possibility for cross-contamination is apparent during the course of excavation based on air monitoring results and visual observations, the subcontractor must be prepared to decontaminate equipment between each test pit. If required, the excavator will be moved to a staging area where the excavator bucket will be steam-cleaned between each test pit.

The subcontractor must provide all equipment and supplies necessary for the cleaning process. If necessary, the subcontractor shall decontaminate all equipment by (1) scraping accumulated soil or material from equipment surfaces, (2) using a high pressure hot water and detergent wash or

equivalent, (3) using a clean water rinse, and (4) collecting spent wash and rinse material in labeled, 55-gallon approved steel drums. The subcontractor will be responsible for providing a means of collecting spent wash and rinse water and containing the materials in approved drums. The 55-gallon drums will be transported to a predetermined staging area after completing test pit activities.

E. WORK HOURS

Standard project work hours will be from 0700 to 1700 with a lunch break, Monday through Friday. Notification and changes to work hours or days must be requested in writing from the subcontractor to Tetra Tech.

F. STANDBY TIME AND WEATHER DELAYS

Standby time will not be paid for any down time related to equipment failure. The Tetra Tech project manager must approve any standby time charges. Weather delays are at the risk of the subcontractor and no compensation will be provided. Tetra Tech reserves the right to shut down operations of the subcontractor in weather conditions such as lightning storms, heavy snow, subzero temperatures or wind chill factors, or high winds that are deemed hazardous and present a health and safety issue to site personnel.

G. HEALTH AND SAFETY

The subcontractor shall adhere to recognized health and safety practices for its industry or trade and shall conform to the requirements set forth in the following sections.

Applicable Health and Safety Requirements

The subcontractor shall maintain and implement a health and safety program pursuant to the Occupational Safety and Health Administration (OSHA) general industry standards and the OSHA construction industry standards and safety orders applicable to its industry.

Health and Safety Plan

The subcontractor shall prepare and submit to Tetra Tech a site-specific health and safety plan meeting the applicable health and safety requirements. The subcontractor's plan shall conform to the requirements of 29 CFR 1910.120 (b) (4). The subcontractor shall prepare a draft version and a final version, resolving all Tetra Tech comments in the final version.

H. OTHER REQUIREMENTS

Medical Surveillance Program - All personnel shall meet the medical surveillance requirements set forth in the applicable HSP. All personnel will have been fit-tested for use of an air-purifying respirator within the last 6 months.

Training Requirements - All personnel shall meet the training requirements set forth in the applicable HSP.

Safety Meetings - The subcontractor shall hold a daily safety meeting of at least 15 minutes duration.

Provision of Site Health and Safety Officer - The subcontractor shall identify a site health and safety coordinator who shall be the point-of-contact for health and safety matters for this project.

First Aid - The subcontractor shall maintain sufficient personnel current in standard industrial first aid and cardiopulmonary resuscitation (CPR) (American Red Cross or U.S. Bureau of Mines standard) and provide a minimum of one qualified person per work crew.

Waste Disposal - The Subcontractor shall dispose of nonhazardous waste as directed by the Tetra Tech on-site representative.

Equipment - The subcontractor shall maintain the following minimum equipment for each work crew (in addition to any specific requirements in the HSP): one fire extinguisher (15 pound or 3A:40BC) and one first aid kit per vehicle.

PERSONNEL PROTECTIVE EQUIPMENT REQUIREMENTS

The following is the minimum requirements for each PPE level used during excavation activities.

LEVEL C:	Hard hat; American National Standards Institute (ANSI) approved safety glasses; steel toe and shank leather work boot; long pants; sleeved shirt chemical protective (CP) tyvek, polyethylene coated tyvek, or saranex coveralls; CP gloves (nitrile, neoprene, or viton construction); and CP overboots, full-face respirator with combination high-efficiency particulate and organic vapor cartridge.
LEVEL B:	Same as level C with the addition of a self-containing breathing apparatus.

SUBMITTALS

The subcontractor shall submit items as designated below to the Tetra Tech Cleveland office 10 days prior to the start of field work:

- Designation of the subcontractor's company health and safety official and field health and safety representative
- Company accident prevention plan and code of safe practices
- Medical surveillance program
- Respiratory protection program
- Training program description
- Specific procedures for test pit excavation
- HSP

The subcontractor shall submit items as designated below to the Tetra Tech project manager immediately prior to the start of field work:

- Copies of employee medical certifications
- Copies of employee training certifications

I. SCHEDULE

The proposed schedule of tasks shall be as follows:

Task	Schedule
Mobilization, orientation, and setup	December 8, 2003
Test pit excavation activities	December 8 and 9, 2003
Demobilization	December 9, 2003

J. DAILY LOG

The subcontractor shall provide Tetra Tech with a log on a daily basis to report the progress made and quantities used for the purposes of billing and payment. The daily log shall be completed and signed by the subcontractor representative and approved by the Tetra Tech field representative.

ATTACHMENT A

PRICE SCHEDULE

RFP #000XXXX

Test Pit Excavation Activities

Description	Unit	Quantity	Fixed Unit Price	Extended Fixed Unit Price (over 2 days)
1. Mobilize/Demobilize				
Move equipment, tools, supplies, and personnel to and from the project site area; includes providing equipment for personal protection.	Lump Sum	1	\$ _____	\$ _____
2. Test Pits				
8 test pits; no max/min width; 15 feet deep/pit. Includes removal and overpacking of drums from test pits so that they can be sampled.	Each	1	\$ _____	\$ _____
3. Decontamination				
Self-contained steam cleaner with temporary drum storage pad.	Lump Sum	1	\$ _____	\$ _____
TOTAL COST				\$ _____
4. Standby Time				
	Hour		\$ _____	\$ _____

Notes:

Standby time will not be paid for any downtime related to equipment failure and weather delays. The Tetra Tech project manager and subcontract manager must approve any standby time changes prior to incurring costs.

The above unit prices shall include all labor, supplies, equipment, and materials necessary to perform the work.